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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,215

06/30/2005

Shinji Hamai

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EXAMINER

POPHAM, JEFFREY D

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,215	Applicant(s) HAMAI, SHINJI	
	Examiner JEFFREY D. POPHAM	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20050630, 20050830</u> . | 6) <input type="checkbox"/> Other: _____ |

Remarks

Claims 1-17 are pending.

Information Disclosure Statement

1. The information disclosure statements filed 6/30/2005 and 8/30/2005 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. They have been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 16 and 17 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter. Claims 16 and 17 are each directed to a “program” which is purely software and, therefore, fails to fall within a statutory category of invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vandergeest (U.S. Patent 6,247,127) in view of Naor (Naor et al., "Certificate Revocation and Certificate Update", January 26, 1998, pp. 1-12).

Regarding Claim 1,

Vandergeest discloses a communication apparatus for communicating with a server apparatus based on a server certificate that indicates validity of the server apparatus, comprising:

A revocation data obtainment unit operable to obtain a revocation data from a repository apparatus storing the revocation data that is information serving as a criterion for judging validity of the server certificate (Column 3, line 66 to Column 4, line 28; and Column 5, lines 25-49);

A revocation data storage unit operable to store the obtained revocation data (Column 3, line 66 to Column 4, line 28; and Column 5, lines 25-49);

An identification data reading unit operable to read out, from the server certificate, identification data used to identify the server certificate (Column 4, line 53 to Column 5, line 49);

A certificate judging unit operable to judge the validity of the server certificate (Column 4, line 53 to Column 5, line 49); and

A communication control unit operable to establish a communication with the server apparatus when the server certificate is judged to be valid, and operable to not establish a communication with the server apparatus when the server certificate is judged to be invalid (Column 4, line 53 to Column 5, line 49);

But does not explicitly disclose the use of revocation and identification numbers and comparing such numbers to determine validity of the certificate.

Naor, however, discloses a revocation number obtainment unit operable to obtain a revocation number from a repository apparatus storing the revocation number that is information serving as a criterion for judging validity of the server certificate (Pages 1-2, sections 1-2.1);

An identification number reading unit operable to read out, from the server certificate, an identification number used to identify the server certificate (Pages 1-2, sections 1-2.1); and

A certificate judging unit operable to judge the validity of the server certificate by comparing the read-out identification number with the revocation number stored by the revocation number storage unit (Pages 1-2, sections 1-2.1). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the CRL management techniques of Naor into the certificate verification system of Vandergeest in order to prevent the certificate revocation lists from

becoming too large and thus becoming difficult to manage, to provide a simple method of checking validity of certificates, and/or to reduce communication costs related to sending large amounts of data related to certificates and their revocation status.

Regarding Claim 14,

Claim 14 is a method claim that corresponds to apparatus claim 1 and is rejected for the same reasons.

Regarding Claim 16,

Claim 16 is a program claim that corresponds to apparatus claim 1 and is rejected for the same reasons.

Regarding Claim 2,

Vandergeest as modified by Naor discloses the apparatus of claim 1, in addition, Naor discloses that the certificate judgment unit judges that the server certificate is valid, when the identification number is equal to or larger than the revocation number (Pages 1-2, sections 1-2.1).

Regarding Claim 3,

Vandergeest as modified by Naor discloses the apparatus of claim 1, in addition, Vandergeest discloses a revocation data judgment unit operable to judge validity of the revocation data, wherein the certificate judgment unit judges the validity of the server certificate by use of the revocation data when the revocation data judgment unit judges that the revocation data is valid (Column 4, line 36 to Column 5, line 49); and Naor

discloses a revocation number judgment unit operable to judge validity of the revocation number, wherein the certificate judgment unit judges the validity of the server certificate by use of the revocation number, when the revocation number judgment unit judges that the revocation number is valid (Pages 1-2, sections 1-2.1).

Regarding Claim 4,

Vandergeest as modified by Naor discloses the apparatus of claim 3, in addition, Vandergeest discloses that the revocation data judgment unit judges the validity of the revocation data by comparing identification data of a repository certificate indicating validity of the repository apparatus with the revocation data stored by the revocation data storage unit (Column 4, line 36 to Column 5, line 49); and Naor discloses that the revocation number judgment unit judges the validity of the revocation number by comparing an identification number of a repository certificate indicating validity of the repository apparatus with the revocation number stored by the revocation number storage unit (Pages 1-2, sections 1-2.1).

Regarding Claim 5,

Vandergeest as modified by Naor discloses the apparatus of claim 4, in addition, Naor discloses that the revocation number judgment unit judges that the repository apparatus is valid when the identification number of the repository certificate is equal to or larger than the

revocation number stored by the revocation number storage unit (Pages 1-2, sections 1-2.1).

Regarding Claim 6,

Vandergeest as modified by Naor discloses the apparatus of claim 3, in addition, Naor discloses that the revocation number judgment unit judges the validity of the revocation number obtained by the revocation number obtainment unit by comparing the revocation number obtained by the revocation number obtainment unit with the revocation number stored by the revocation number storage unit (Pages 1-2, sections 1-2.1).

Regarding Claim 7,

Vandergeest as modified by Naor discloses the apparatus of claim 6, in addition, Naor discloses that the revocation number judgment unit judges that the revocation number obtained by the revocation number obtainment unit is valid, when the obtained revocation number is equal to or larger than the revocation number stored by the revocation number storage unit (Pages 1-2, sections 1-2.1).

Regarding Claim 8,

Vandergeest discloses a certificate issuing apparatus for issuing a server certificate indicating validity of a server apparatus, comprising:

A revocation data storage unit operable to store revocation data that is information serving as a criterion for judging validity of the server certificate (Column 3, lines 25-65); and

An issuing unit operable to issue a new server certificate (Column 3, lines 25-65);

Wherein the issuing unit issues the new server certificate that includes identification data indicating that the certificate is currently valid (Column 3, lines 25-65);

But does not explicitly disclose the use of revocation and identification numbers and use of such numbers in determining the validity of certificates.

Naor, however, discloses a revocation number storage unit operable to store a revocation number that is information serving as a criterion for judging validity of the server certificate (Pages 1-2, sections 1-2.1); and

An issuing unit operable to issue a new server certificate (Pages 1-2, sections 1-2.1);

Wherein the issuing unit issues the new server certificate that includes an identification number indicating a value which is equal to or larger than the revocation number stored by the revocation number storage unit (Pages 1-2, sections 1-2.1). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the CRL management techniques of Naor into the certificate verification system of Vandergeest in order to prevent the certificate revocation lists from becoming too large and thus becoming difficult to

manage, to provide a simple method of checking validity of certificates, and/or to reduce communication costs related to sending large amounts of data related to certificates and their revocation status.

Regarding Claim 15,

Claim 15 is a method claim that corresponds to apparatus claim 8 and is rejected for the same reasons.

Regarding Claim 17,

Claim 17 is a program claim that corresponds to apparatus claim 8 and is rejected for the same reasons.

Regarding Claim 9,

Vandergeest as modified by Naor discloses the apparatus of claim 8, in addition, Naor discloses a revocation number update unit operable to update the revocation number stored by the revocation number storage unit to a number larger than an identification number of a server certificate to be revoked, when notified of the identification number of the server certificate to be revoked (Pages 1-2, sections 1-2.1).

Regarding Claim 10,

Vandergeest as modified by Naor discloses the apparatus of claim 9, in addition, Naor discloses that the issuing unit issues the new server certificate for a server apparatus with a server certificate that is assigned an identification number smaller than the updated revocation number, in the case where the revocation number update unit updates the revocation

number stored by the revocation number storage unit (Pages 1-2, sections 1-2.1).

Regarding Claim 11,

Vandergeest as modified by Naor discloses the apparatus of claim 8, in addition, Naor discloses a revocation number update unit operable to specify an identification number of a server certificate, an expiration date of which is approaching, and update the revocation number stored in the revocation storage unit to a number larger than the identification number (Pages 1-2, sections 1-2.1).

Regarding Claim 12,

Vandergeest as modified by Naor discloses the apparatus of claim 11, in addition, Naor discloses that the issuing unit issues the new server certificate for a server apparatus with a server certificate that is assigned an identification number smaller than the updated revocation number, in the case where the revocation number update unit updates the revocation number stored by the revocation number storage unit (Pages 1-2, sections 1-2.1).

Regarding Claim 13,

Claim 13 is an independent claim comprising the certificate issuing apparatus of claim 8 and the communication apparatus of claim 1, and is therefore rejected for the same reasons as the combination of claims 1 and 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY D. POPHAM whose telephone number is (571)272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey D Popham
Examiner
Art Unit 2137

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Examiner, Art Unit 2137

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Supervisory Patent Examiner, Art Unit 2137